## NORTH PACIFIC OCEAN

## By WILLIS E. HURD

May, usually a quiet month on the North Pacific, seems to have been quieter than normal this year, as only a few gales, mostly of a minor and local character, have been reported. In only four instances did they exceed force 9. Of these, a northeast gale, force 11, occurred during the prevalence of a cyclone south of Japan on the 2d; a south gale, force 10, was experienced on the 12th near 44° N., 148° W., in connection with a cyclone of moderate intensity centered slightly to the westward; a west gale, force 10, occurred on the 13th, south of the middle Aleutians, during an intensification of the Low of that region, and a whole northwest gale occurred off the central California coast on the 14th, along the steep gradients existing between a strong North Pacific anticyclone on the one hand and a continental depression on the other.

Japanese weather maps indicate that a typhoon of considerable depth lay off the south coast of Honshu on the 11th and 12th, but no reports are yet at hand as to its gale severity. The typhoon apparently originated south of Guam near the first of the month. It touched the central Philippines on the 8th, then recurved, and by the 10th, with a minimum pressure of about 28.82 inches, lay southeast of the Nansei Islands, whence it moved toward Japan, skirting the lower coast and passing northeastward, with greatly diminished intensity.

Pressure over the western part of the ocean was unsettled, and numerous depressions from the continent caused disturbed weather in Asiatic waters.

The Aleutian cyclone, especially during the latter half of the month, was developed to almost winter strength over the western part of the Gulf of Alaska, with the average center still at Kodiak, and, as in the preceding two months, with pressure a quarter of an inch below the normal.

The North Pacific anticyclone exhibited fewer signs of disintegration than usual because of intruding cyclones, and persisted strongly throughout the month.

The following table gives pressure data for several island and coast stations in west longitudes:

Table 1.—Averages, departures, and extremes of atmospheric pressure at sea level at indicated hours, North Pacific Ocean, May, 1928

Stations	Aver- age pres- sure	Depar- ture from normal	Highest	Date	Lowest	Date
Dutch Harbor 1. St. Paul 1 1 Kodiak 1 2 Midway Island 1 2 Honolulu 3 Juneau 3 Tatoosh Island 4 4 San Francisco 4 San Diego 3 4	Inches 29, 67 29, 76 29, 62 30, 14 30, 06 29, 94 30, 08 29, 97 29, 93	Inch -0. 25 -0. 10 -0. 25 +0. 05 +0. 05 +0. 01 -0. 05 -0. 01 0. 00	Inches 30. 26 30. 32 30. 24 30. 28 30. 15 30. 44 30. 37 30. 14 30. 05	10th 27th 12th 11th 28th 12th 11th 1st	Inches 29, 02 28, 88 29, 08 29, 94 29, 59 29, 59 29, 78	18th. 5th. 16th. 30th. 11th. 28th. 28th. 14th. 2d.

<sup>P. m. observations only.
For 30 days.</sup> 

At Honolulu the prevailing wind was from the east, the trades blowing about 90 per cent of the time. The maximum velocity was 27 m. p. h. from the east, on the 12th.

One tropical disturbance occurred in Mexican coast waters this month—the first to be reported in May for period 1912 to 1928. It was probably of a minor nature, its greatest reported barometric depth being 29.77 inches, on the 25th, in 15° 20′ N., 107° 16′ W., maximum windforce 8, from the northwest. The disturbance was under observation of the British steamer Wray Castle from the 24th to the 27th. On the last date she was in 15° 44′ N., 112° 27′ W., wind still slowly backing, and pressure rising.

A heavy and fairly persistent blanket of fog overhung the ocean in central and upper east longitudes, from 6 to 12 days of the month being reported foggy in most sections between latitudes 40° and 50° N., longitudes 140° and 175° E. Isolated fog occurred over the eastern half of the ocean, the percentage in no locality being high. The northern and southern extremes of reported fog were St. Paul Island, in Bering Sea, and off the southern half of Lower California.

A. m. and p. m. observations.
Corrected to 24-hour mean.